

## THE BANNERSTONE

I am the scarab of the Mississippi Valley  
The bannerstone of Stone Age chieftains  
Reflecting long-forgotten concepts  
Of immortality and eternity

Modeled by earliest sculptors  
Like unto a butterfly  
That symbolized for ancient peoples  
The perfect metamorphosis  
Adventuring to the Sun God's realm  
During Spring's days  
I visualized resurrection  
For Winter's cocoon-wrapped spirits  
Of Stone Age dead

Signet of warriors  
Token of proud fighting clans  
For wise old mystics  
And ambitious Youth  
A symbol am I  
Of authority and leadership  
Passport for sovereign's envoys

Mighty hunters, bold voyagers  
Journeying into nations  
From Bering's to Magellan's Straits  
Prestige power and safe conduct  
Were assured my chosen bearers

Beautiful am I  
Lovingly carved  
From jeweled rock  
Of mottled granite rose-blown quartz  
Banded slate lustrous and sparkling crystal.  
Finely polished  
High was my place  
In petal processions  
In vast tribal encaves  
From generation to generation  
Loyally treasured.

Now interred breast-high  
With alibonnetted shades  
Of king-like chiefs of long lost peoples  
Cloistered.  
I dwell in the hills eternal

-Charles C Thomas-



# A GUIDE FOR AUTHORS

MANUSCRIPT PROOF AND ILLUSTRATION



# A GUIDE FOR AUTHORS

Manuscript, Proof, and Illustration

By

PAYNE E. L. THOMAS



CHARLES C. THOMAS PUBLISHER

Springfield Illinois U S A



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**Part I**

**MANUSCRIPT AND PROOF**





# 1

## INTRODUCTION

### Well Prepared Manuscripts Effect Economy.

Careful preparation of a manuscript will effect economy to author publisher and printer. It will lessen the time needed for the publisher to complete necessary processing and specifications prior to including the manuscript in the printing schedule. It will lessen the work of the author in reading the proof. The printer will be able to handle his mechanical procedures with accuracy and dispatch. The end-result for all will be the satisfaction of a book produced on schedule with uniformity and with good typographic form.

A Definite Form of Procedure. The object of these suggestions is to acquaint all who are called upon to work with manuscript and proof with a definite form of procedure. It is our wish to assist authors particularly in the preparation of their materials in such a way that on adhering to the principles set forth herein, they can be assured of a minimum of delay in publication.



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included in your manuscript, with the exception of the Half-title Pages Copyright Page and Publisher's Acknowledgment Page should be furnished by the author in the order listed above

The Title Page of a book is one of the most important pages. It tells the prospective reader who you are 'what you are and "by what authority you speak. Quite frequently the title page with its information is the deciding factor in the acceptance or rejection of a publication by a prospective purchaser. It is most important that an author should consider carefully the degrees and professional affiliations past and present, that should be mentioned.

The Contents should be typed in proper form, listing all headings in the order in which they appear in the body of the text. Proper form denotes that headings should be indented to show their relative values. Page numbers are not added to the Contents until after the material for the body of the text is in page proof.

When there are chapters in a publication written by authors other than the principal author or editor the names, degrees and affiliations of these contributing authors should be listed at the beginning of their respective contributions following the chapter title. It is also customary to insert the names of contributing authors on the Title Page and in the Contents following the listing of the chapter titles.

Scope, Plan, and Purpose There should be sent, with the manuscript, three paragraphs totaling not more than 400 words stating the scope, plan and purpose of the book. This material will be used by the publisher for descriptive matter on the jacket and for circulars and other advertisements.

This information should place emphasis upon that material contained in the manuscript which is not currently available in any other literature.

# MANUSCRIPT FORM

## WHAT TO FURNISH

It is the province of an author to supply legible typewritten copy with all necessary drawings and other illustrative material complete in every detail

Preparation of manuscript. Copy can be prepared by an author and be in excellent form for the printer. It involves time labor and expense to rewrite copy after it appears in proof form. It is an error which many writers make. Proper preparation of materials is neglected until proof is received then a complete editing is done a slash here and there commas galore inserted changes which do not improve the construction but are the fancy of the moment and then a large bill for alterations. All this can be avoided by a close application to the original copy before it is submitted to the publisher. It is more satisfactory to the publisher to receive well-prepared copy than to charge for alterations - the latter is always more or less a source of contention. Set a definite style for your manuscript and follow that style consistently.

Order of Manuscript. The following is the proper order of appearance of the different parts of a manuscript: First Half-title Page Frontispiece Title Page Copyright Page Dedication Page Foreword or Introduction Preface Acknowledgments Page Contents Second Half-title Page Main Text Bibliography References Appendixes Index Publisher's Acknowledgment Page. The aforementioned pages which are to be

included in your manuscript, with the exception of the Half title Pages Copyright Page and Publisher's Acknowledgment Page should be furnished by the author in the order listed above

The Title Page of a book is one of the most important pages. It tells the prospective reader 'who you are' 'what' you are and by what authority you speak. Quite frequently the title page with its information is the deciding factor in the acceptance or rejection of a publication by a prospective purchaser. It is most important that an author should consider carefully the degrees and professional affiliations, past and present, that should be mentioned.

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- 1 Per cent or %
- 2 1 grain or 1 gr
- 3 19 to 25 or 19-25
- 4 2 hours or 2 hrs
- 5 2 minutes or 2 min
- 6 Figure or Fig
- 7 (a) (b) or a b

Whichever form of each of the above or the countless other examples which could be given, is selected, it should be consistent throughout. Under no circumstance excepting where a sentence begins with a number should more than one form be used in the same manuscript.

Accuracy in Typing: Manuscript should be read back very carefully by the author every time it is copied. After all the responsibility for accuracy rests upon the author himself -- not upon his typist. Any corrections inserted should be printed, since interpretation of handwriting is often difficult. Dosage formulae and tabular materials particularly must be checked and double checked by the author.

No word should be divided at the end of a line -- if the full word will not go in the line the whole word should go at the beginning of the next line.

Identifying a Manuscript: Manuscripts should be kept flat, never folded or rolled. Do not sew tie or otherwise bind the sheets together.

All pages should be numbered consecutively from 1 to the end of the work, duplicating no numbers even though it means renumbering many pages in order to avoid duplication. Use no "a s" and "b s" in numbering. Chapter title pages should have the author's last name and at least an abbreviation of the book title typed in the upper left hand corner to facilitate identification if pages become separated in the printing plant.

## TYPING

Manner of Typing. Manuscripts should be typewritten with a new and clear black ribbon, double spaced on a good grade of white paper 8 1/2 x 11 inches and on one side of the paper only. A carbon copy should be kept by the author for his files to assure protection against loss of the original and for reference by correspondence during the process of publication. The original copy is to be sent to the publisher. A two-inch margin should be allowed on the left side of the page for the copy-editor's notations.

Consistency in Typing. Consistency is most important in spelling the use of abbreviations and in capitalization. It would not be practicable to cover here the many rules and examples for consistency. No one particular set of rules will have preference for use by this publisher; rather we stress the need for use of one and the same set of rules -- no matter which form this may be -- in order that the manuscript may be prepared in that same form throughout. It is recommended that a single typist or stenographer be employed in the development or copying of the manuscript. It is this publisher's experience that when a manuscript is typed by more than one person, several styles of spelling abbreviation and capitalization are used making it difficult for an editor to bring about a form of consistency. The typist or stenographer should be selected on the basis of competency in knowledge of the fundamentals of the use of punctuation fundamental grammar spelling and correct English usage. Such a person should be an experienced typist -- not someone with little training or capability.

Many pages could be devoted to Consistency in Typing. A few of the commonly misused forms follow. Either is correct if used consistently.

- 1 Per cent or %
2. 1 grain or 1 gr
- 3 19 to 25 or 19-25
- 4 2 hours or 2 hrs
- 5 2 minutes or 2 min.
- 6 Figure or Fig
- (a) (b) or a..b

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Center those headings of major importance typing them in all capital letters on a typewriter. Sub-headings may be centered and typed in caps and lower case on the typewriter. Headings centered on the page should not be followed by punctuation of any kind. Side-headings may be typed in caps and lower case and run into the paragraph, at the beginning of the paragraph, and followed by a period, a dash or a colon. These too should be consistent.

Consistency in Headings. In the event the typing of headings and sub-heading has not been consistent in accordance with their relative value the headings may be keyed to a reference guide furnished by the author as to his suggestion as to how the headings should be set in type. The author may use either numbers or letters of the alphabet as keys and such keys should be placed in the left margin of the manuscript pages directly opposite their identified heading. For example chapter titles should be identified with an encircled figure 1 or an encircled capital letter A. Secondary headings should be identified with 2 or B and so on.

Indication of Types. One horizontal line drawn below words or letters means to set them in italics.

Two lines below words or letters — no matter whether the typing is originally typed in capitals or small letters — mean to set in small caps. If you want the wording all in small caps underscore with two straight lines and write SC in the margin.

Three lines drawn below words or letters mean to set them in Roman caps.

A wavy line drawn below words or letters means

## PARAGRAPHS

Paragraph Size. Authors should keep in mind that paragraphs should generally not run to more than one third of the printed page -- or to about 100 words. When paragraphs run longer than this they should be broken up if at all possible. Shorter paragraphs are easier to read and comprehend.

Paragraph Indentation. Paragraph indentations should be a uniform number of spaces -- four or five are enough. One or two spaces do not indicate the beginning of paragraphs with the proper degree of certainty.

## TEXT REFERENCES

Many manuscripts will have in the text references to other parts of the manuscript, to figures, pages, chapters, etc. The references of this nature should be consistent throughout the text. Some references are put in parenthesis within a sentence and at other times are put in parenthesis at the end of a sentence in which they are mentioned.

For example: See page or see page should be used according to a definite plan. Occurring at the end of a sentence, such references should be included before the period, in parenthesis, and beginning with a small s. Other references which should be consistent are: i.e., viz., op. cit., Ibid.

Figure or Fig. c.f. etc.

## HEADINGS

Evaluation of Headings. In most books there are divisions and sub-divisions of a subject which are identified through headings and sub-headings. It is important that these be set in type by a printer in a consistent manner and in accordance with their rela-

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Three lines drawn below words or letters mean to set them in Roman caps.

A wavy line drawn below words or letters means



to set in boldface This is standard throughout the United States

## EXTRACTS AND CASE HISTORIES

In many manuscripts there are large extracts from other sources which while they have a direct bearing on the subject of the book are not of sufficient importance to be set in as large a type as that used for the main text These extracts case histories etc may be indicated to the publisher by the author by means of single spaced typing or indentation from both sides of the paper Such materials being set in smaller type need not be enclosed in quotation marks Being set in different sized type than the text the reader's attention is attracted to these items Then he can read them or pass over them, as he chooses

Any extracts to be set in smaller type must begin a new line If extracts are not begun on a new line it is easy for an editor publisher or printer to overlook them in doing necessary work in processing the manuscript After type is set corrections are costly

## FOOTNOTES

Location in Manuscript A footnote should be written with single spacing directly below the line of text in which the reference occurs Begin a new line for each footnote and separate it from the text by a line drawn clear across the page both above and below the footnote A footnote reference should be made by superior numbers or by star-and-dagger reference marks directly after the word referred to in the text and by a corresponding sign preceding the note itself

Reference Marks to Use In a work containing few footnotes it would be well to use star-and-dagger

reference marks. On the same page the order of star-and dagger reference marks is

- \* First reference on page
- † Second reference on page
- ‡ Third reference on page
- § Fourth reference on page
- || Fifth reference on page
- § Sixth reference on page

Where there is frequent use of footnotes in the text, it is preferable to use superior numbers. These should be kept in numerical order throughout single chapters or throughout the entire book.

Reference Mark Punctuation. Superior numbers as reference marks in the text are printed outside and after all punctuation marks. If one superior number follows immediately after another these are divided by commas but no period is used after the last superior number.

## BIBLIOGRAPHIES AND REFERENCES

Order. If a bibliography or list of references is in alphabetical order it is not necessary to insert both a reference number and the author's name in the manuscript text, except if there is more than one reference by the same author. If the bibliography or list of references is in chronological order all reference numbers must appear in the manuscript text (that is as a superior number reference above the author's name or in parenthesis). When superior numbers

are used for reference to footnotes references to the bibliography should be placed in parentheses

Source Bibliographic references should be carefully checked for punctuation abbreviation and style Consistency is most important An excellent source for checking is the QUARTERLY CUMULATIVE INDEX MEDICUS

Forms A complete reference to an article in a periodical contains the following items in the order listed

- 1 Author's surname and initials
- 2 Title of the article (capitalize only initial word and proper nouns)
- 3 Name of the periodical abbreviated according to the QUARTERLY CUMULATIVE INDEX MEDICUS or written correctly in full (an abbreviation devised by an individual author is likely to lead to confusion)
- 4 Volume
- 5 Page
- 6 Month - and day of the month if the periodical is published more often than once a month
- 7 Year

Examples are

- a (simple) Smith John J A M A 273 1945  
 b (complete) Sutherland C G in discussion on  
 Weir J F and Snell A M Symptoms that  
 persist after cholecystectomy J A M, A 105  
 1093 (Oct 5) 1935

A complete reference to a book contains the following information in the order listed

- 1 Author's surname and initials
- 2 Title of the book (capitalize all main words)
- 3 Edition
- 4 Place of publication
- 5 Name of the publisher
- 6 Year of publication

7 Volume II more than one has been published

8 Page

Examples are

a (simple) Cushing Harvey Pituitary Body and Hypothalamus Springfield, Thomas 1932

b (complete) Jullusberg F in Jadassohn, J: Handbuch der Haut- und Geschlechtskrankheiten, Berlin, Julius Springer 1931 vol. 7 pt. 2, p 131

Consistency: List authors names consistently in all references For example if authors are listed as

Smith A J and Jones B E

the last names should always appear first The same example listed incorrectly is

Smith J A and B E Jones

## TABLES

Tables to be set in type should be placed in the manuscript at the end of the manuscript since frequently tables cannot be inserted immediately following their reference because of the break in paging In addition, the tables must be separated from the text when type is set. The position of insertion of tables should be noted in the text margins Tables should be numbered in Roman numerals consecutively throughout the book.

## SINGLE- AND DOUBLE-COLUMN FORMATS

Sometimes an author will wonder as to whether single column or double-column formats should be used for his book.

A double-column format is more expensive than a single-column format because there are additional charges for the added time spent in page makeup and presswork A double-column page may run \$2.00 more than a page of the same size set single-column.

A double-column page makes for added expense in working with corrections and revised editions. It is more difficult to make changes because the columns have to be balanced out. This is however frequently offset by the fact that less lines have to be reset to incorporate a correction.

On the other hand when working with a double-column page a larger trim size can be used and this reduces presswork binding and paper cost. A publisher would have to examine the manuscript in question to make definite recommendations as to the manner in which the materials should be set.

## CONTRIBUTED WRITING

Style Contributors should be instructed to write according to certain simple rules that will give each division of the book the same writing organization and general style.

Contents The contributor should furnish the editor by a given date an outline of his Contents and his proposal of the scope plan and purpose of his section with an indication of the number of words and illustrations to be included.

Progress Reports Regular progress reports may be given by the editor to his contributors advising on the progress of the rest of the manuscript preparation. In turn the contributors should make regular progress reports to an editor.

A definite deadline should be set for the completion of work.

The Editor's Responsibility It is the editor's responsibility to receive all contributions from the various authors writing for a book. The editor should see that the several contributions are received on schedule and then personally check them or have them checked for consistency. Separate sections of

a book should not be sent the publisher as they are received from contributors. The editor should send all sections complete in every detail to the publisher at one time.

For the handling of proof when there are several contributors see PROOF page 17

## PERMISSIONS AND ACKNOWLEDGMENTS

Reproduction of Copyrighted Matter. An author should secure permission in writing from copyright owners to make use of any materials previously copyrighted elsewhere that are incorporated in his work. The copyright owner's name may be determined by referring to the copyright notice. In asking for permission to reproduce copyrighted material the request should include the exact definition of the material to be used, the manner in which the material is to be used, where it is to be published and by whom, and that the customary acknowledgment of credit will be made. It is seldom that a reasonable request will be refused. Letters of permission, or copies thereof secured by an author, should be sent to his publisher at the time of delivery of his manuscript.

When illustrations are reproduced from other works and when permission to reproduce has been secured, the author should take care that the wording of the acknowledgment is the same in each case. It is customary to have the acknowledgment, as the last sentence in the legend of the illustration to be reproduced somewhat in the following manner: From Sterling Bunnell's SURGERY OF THE HAND 2nd Ed 1949 Courtesy of the J B Lippincott Company Philadelphia Pennsylvania

Permission from Patients. It is necessary for authors to secure permission from patients in order to reproduce the illustrations of such patients in a book.

A double-column page makes for added expense in working with corrections and revised editions. It is more difficult to make changes because the columns have to be balanced out. This is however frequently offset by the fact that less lines have to be reset to incorporate a correction.

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A definite deadline should be set for the completion of work.

The Editor's Responsibility. It is the editor's responsibility to receive all contributions from the various authors writing for a book. The editor should see that the several contributions are received on schedule and then personally check them or have them checked for consistency. Separate sections of

# 3

## PROOF

### ORDER OF PROOF

Galley Proof. The author will first receive two sets of galley proof and his original manuscript. The galley proof is furnished on long narrow strips containing the equivalent of about three pages of type. One set of proof usually contains the printer's proof-readers marks and is called the 'master proof'. This master proof is the one to be read by the author, corrected, and returned to the publisher -- not the printer -- with the original manuscript (now called the 'foul copy'). An author should keep the duplicate set of proofs and should mark on it the same corrections that are marked on the master set which is returned to the publisher.

When there are several contributors to a book, galley proof will be sent the editor in triplicate. One set is to be kept for the editor's files. The second set is to be separated by contributions and sent to the contributors for correction. The third set (master set) is to be retained by the editor and when all corrected sections have been received from the authors all corrections are to be transferred to the master set before it is returned with the original manuscripts to the publisher.

Page Proof. After the galley proofs are corrected by the printer the author will receive a master set of page proof and the foul galley (the foul galley is the master galley proof which was previously returned and



or journal. This is necessary even though the patient's eyes may be masked. In the case of a child the patient's parents should be consulted. There may be some instances in which the consent has not been and cannot be secured; in such instances the eyes should be masked and names of patients omitted.

Form of Acknowledgment. It is often customary for authors to make acknowledgments in their Preface to sources from which information in the book was secured. If there are considerable acknowledgments of this type it is generally better to have a separate Acknowledgments Page which is to immediately follow the Preface on the next right-hand page.

# 3

## PROOF

### ORDER OF PROOF

Galley Proof. The author will first receive two sets of galley proof and his original manuscript. The galley proof is furnished on long narrow strips containing the equivalent of about three pages of type. One set of proof usually contains the printer's proof-readers marks and is called the master proof. This master proof is the one to be read by the author, corrected, and returned to the publisher -- not the printer -- with the original manuscript (now called the foul copy). An author should keep the duplicate set of proofs and should mark on it the same corrections that are marked on the master set which is returned to the publisher.

When there are several contributors to a book, galley proof will be sent the editor in triplicate. One set is to be kept for the editor's files. The second set is to be separated by contributions and sent to the contributors for correction. The third set (master set) is to be retained by the editor and when all corrected sections have been received from the authors all corrections are to be transferred to the master set before it is returned, with the original manuscripts to the publisher.

Page Proof. After the galley proofs are corrected by the printer the author will receive a master set of page proof and the foul galley (the foul galley is the master galley proof which was previously returned and

Save your time and your printer's patience! When you indicate changes on proofs, the use of standardized proofreaders marks will help your printer understand just what corrections you want. Always mark on the copy margins opposite indicated errors. Do not write over the print or between the lines.

Probably you'll never have to mark up a proof as much as we've marked up the example below! But here's how it should be done

Deadlines are deadly things indeed. Your customer may be hundreds of miles away but when they want their plates — or electros — or engravings — or finished presswork in a hurry you have to come through. That's when low-cost Air Express is the only answer for it's ready to speed things through the air at 300 miles a minute — giving you extra time for production.

It's economical! In the face of rising costs everywhere, most Air Express rates have fallen steadily downward in the last five years. You can ship a 2 lb. package clear across the country overnight for only \$1.50. (See examples of other low rates on back page.) Rates include door-to-door pick-up and delivery in all cities and principal towns within established service limits. And valuation coverage is provided without extra charge, up to \$50 for each 100 lbs.

It's everywhere! Air Express serves more than 1,000 airline cities direct. And because it's a division of Railway Express it also serves 22,000 off-airline offices across the U. S. A. by coordinated plane-plus-train-plus-truck. This gives you air speed on the long haul where it counts most.

There's only one receipt — one carrier — one responsibility! Use low-cost Air Express — the fast economical way to ship 1 lb. or 9 tons, 200 miles or 2,500!

Figure 1a. An example of how proofreaders marks are used in correcting manuscript and proof. Courtesy Air Express Division of the Railway Express Agency Incorporated



^	Correct as margin indicates	<u>    </u>	Under word means caps
<i>let</i>	Let it stand	<u>    </u>	Under word means small caps
x	Bettered letter	—	Under word means italic
<u>    </u>	Straighten lines	<i>rom</i>	Change to Roman
///	Unevenly spaced—line up	<i>ital</i>	Change to Italic
<i>no p</i>	No paragraph	<b>bf</b>	Bold face
<i>omit</i>	Omission here	^	Comma
<i>p</i>	Paragraph	;/	Semicolon
<i>tr</i>	Transpose	o	Colon
<i>2</i>	Delete as indicated	o	Period
<i>2</i>	Delete—close up	2/	Interrogation mark
o	Upside down		Exclamation mark
c	Close up	/=	Hyphen
<i>insp</i>	Insert space	2	Apostrophe
↓	Push down this space	<i>q/2</i>	Quotation marks
□	Indent one em	<i>a</i>	Superior letter or figure
[/]	Move to left/or to right	<i>^</i>	Inferior letter or figure
<i>7/L</i>	Raise/or lower	[/]	Brackets
///	Half space letters	(/)	Parentheses
<i>wt</i>	Wrong font	<i>te</i>	One-em dash
sc	Small capitals	<i>2</i>	Two-em dash
<i>Cap</i>	Capitals	<i>lc</i>	Lower case
C sc	Caps—small caps	<i>or?</i>	Is this right.

Figure 1b Proofreaders marks and what they mean.

which the author uses to check against the master page proof) It is not expected that an author will make additions or deletions to the page proof unless absolutely essential. The master page proof with the author's OK thereon and the foul galley are to be returned to the publisher. The duplicate set of page proof is kept by the author (if the author makes any changes to the master page proof these should be plainly indicated and the proofs should be marked OK as corrected). The duplicate proof should be marked with the same corrections which are inserted into the master set.

Except in the case of a very long book the author should return proofs complete in one lot. Proofs should be read as fast as received however so that when the last lot is received by the author the whole of the proof may be finished and returned quickly.

When there are several contributors to a book the editor will receive two sets of page proof and the foul galley proof. It is usually unnecessary to send sections of page proof to the various contributors inasmuch as they have made corrections in galley proof.

The editor should check all corrections noting additional corrections in the master set of page proof and return the corrected master set to the publisher together with the foul galley proof.

## PROOFREADERS SIGNS

Learn to use the proofreaders signs for making corrections. If you cannot do this write distinctly in the margin what you require. Do not assume that the printer will guess your meaning.

For your convenience Figure 1 is included to show the proofreaders marks which are standard throughout the United States. An example is also given of the manner in which they are used while correcting manuscript and proof.

## MARKING TEXT PROOF

Use a Pencil. Pencil should be used for marking proof in good, clear writing or printing. Do not mark proof lightly with pencil as such light marks might not be seen by the printer. However do not use ink, blue pencil, or red pencil in correcting proof as sometimes corrections are not made properly by an author and the publisher must revise his corrections in order that the printer may be able to follow them.

Put Corrections in the Margins. The right way to make corrections in proof is to mark the correction in the margin exactly opposite the word or letter to be corrected, and in the proof to draw a vertical line through wrong letters or cross out with a strong horizontal line the word or words to be changed. Please note that only marks in the margin are likely to be seen. An author should use conventional proof marks and print corrections unless his handwriting is quite legible to one unfamiliar with it.

Additions. If an addition of a number of lines is to be made to galley proof such may be typewritten on a piece of paper and pasted to the margin of the proof and folded over indicating where the new matter is to go in the print. Pasting is the only safe way to make such additions -- do not use pins or clips.

Queries. All queries in proof should be answered. If the query is accepted, strike out the (?) or query accompanying the mark and leave the mark. If the query is rejected cross out the whole thing. A query left unanswered will have nothing done about it.

## EFFECT OF TEXT PROOF ALTERATIONS

Is a Correction Necessary? The importance of a correction should be carefully considered and if it is really necessary or very desirable it should be made

with knowledge of the consequences

Alterations in proofs are troublesome as well as expensive and should be avoided when not absolutely necessary

All matter to be printed has been set by the printer to conform to the copy delivered to him

What a Correction Entails. Much modern type-setting is done on machines which cast a complete line of type at one time therefore a change of a single letter or any character, in a line makes it necessary to reset the entire line deletions or insertions of one or two words in a paragraph often make it necessary to reset that entire paragraph A correction at the end of a paragraph in the proof, is likely to be less costly than one at the beginning where a word added or taken out may mean the resetting of many lines of type or of the whole paragraph and a possible remaking of several pages In page proof particularly an author should be especially careful to make a compensating deletion in the same line if possible to allow for an addition and a compensating addition for any deletion For example if a word is added to the first line of a paragraph a word of the same length should be deleted in one of the lines immediately following sometimes it is possible to use a short word in place of a long one and achieve the same results Otherwise lines may have to be carried back or forward to the end of the chapter And if a change should result in the last page of the chapter being extended on to an additional page not only the page numbers but most likely the page headings would have to be changed to the end of the book It would be a vital correction indeed to be worth the human labor and expense involved in such a change

If there are many corrections these will produce uneven spacing When type is first set the spacing is equal and uniform But as changes are made some

lines must be squeezed tight, others blown apart, and the printed page loses its attractiveness

To give some idea of the expense involved in making corrections to type each line changed, whether for a comma or several words costs from 10 to 15 cents per line. Make corrections like you were spending money save unnecessary expenditures unless the finished quality demands and justifies the expenditures

## PROOF OF ILLUSTRATIONS

Galley Proof. If there are illustrations to be printed in the text of the book, you will be provided with the engravers proof of each one for identification. In the event that these are not in their proper order in the galley proof text (they seldom are) see that the proof of each engraving is numbered correctly and that its corresponding legend is included in the galley proof also correctly numbered. As you turn through the galley proof and reach the place where the first illustration is to appear write in the margin of the galley where the cut is to be placed in the type Figure #1 goes about here. On the sheet containing the identifying proof of the cut, write This belongs to galley 5 or whatever page number appears on the galley proof page. When it can be done the cuts should be spotted in the manuscript in this manner rather than waiting to do it in the proof

Page Proof. In the page proof, see that the right cut has been put in the right place among the type and with the proper side up and with the proper legend. Because of the necessity of page make-up cuts may not be placed at the exact line you had indicated in the galley for that spot may be so near the foot of the page or the top of the page that not enough room is left for the cut, and the printer will have placed it as close to the spot as he could



with knowledge of the consequences

Alterations in proofs are troublesome as well as expensive and should be avoided when not absolutely necessary

All matter to be printed has been set by the printer to conform to the copy delivered to him

What a Correction Entails. Much modern type-setting is done on machines which cast a complete line of type at one time therefore a change of a single letter or any character in a line makes it necessary to reset the entire line deletions or insertions of one or two words in a paragraph often make it necessary to reset that entire paragraph A correction at the end of a paragraph in the proof is likely to be less costly than one at the beginning where a word added or taken out may mean the resetting of many lines of type or of the whole paragraph and a possible remaking of several pages In page proof particularly an author should be especially careful to make a compensating deletion in the same line if possible to allow for an addition and a compensating addition for any deletion For example if a word is added to the first line of a paragraph a word of the same length should be deleted in one of the lines immediately following sometimes it is possible to use a short word in place of a long one and achieve the same results Otherwise lines may have to be carried back or forward to the end of the chapter And if a change should result in the last page of the chapter being extended on to an additional page not only the page numbers but most likely the page headings would have to be changed to the end of the book It would be a vital correction indeed to be worth the human labor and expense involved in such a change

If there are many corrections these will produce uneven spacing When type is first set the spacing is equal and uniform But as changes are made some

## PROOF QUALITY

The quality of the printing of text and illustrations in proof is not indicative of the quality that will be manifest in the completed book. Standard proofing papers are used and the quality of paper is not that which will be used in the book. In the printing of the book every care will be taken to bring out clearly the text and illustrations and to eliminate any smudges or imperfections that show in the proof.

## ENGRAVERS PROOF

If there are to be illustrations in the book an author will receive 'engravers proof' in duplicate and will have his original illustrations returned to him for comparison. Engravers proof are furnished to show exactly how such illustrations will look in the book. If the reproduction of the original illustrations is satisfactory as shown by the engravers proof the author should return the one master set of engravers proof to the publisher with his OK thereon and retain the extra set for his files along with the original illustrations. If there are corrections to the engravers proof the corresponding original illustrations should be returned to the publisher with the master set of engravers proof the master set showing corrections in marginal notes. See Reduction Top and Identification page 37

## PROOF RESPONSIBILITY

Authors sometimes assume that their books receive a critical and careful proof reading in the publisher's office in addition to the reading given the work by the printer's proof readers and by the author. This is not a general rule nor is it always necessary. It should be understood that it is not the publisher's duty to do the critical reading of proof. Corrections to galley proofs to text or engravings up to ten per cent (10%) of the cost of the original composition and engravings will be at the expense of the publisher. Corrections above ten per cent (10%) will be at the expense of the author. Corrections in page proof will be at the expense of the author. All corrections and additions should be made in galley proof. Errors marked in galley proof which the printer fails to make in page proof should be the only corrections in page proof.

## PROOF QUALITY

The quality of the printing of text and illustrations in proof is not indicative of the quality that will be manifest in the completed book. Standard proofing papers are used and the quality of paper is not that which will be used in the book. In the printing of the book every care will be taken to bring out clearly the text and illustrations and to eliminate any smudges or imperfections that show in the proof.

## -4-

### INDEXING

#### WHEN TO PREPARE

The value of an index to most publications cannot be adequately described. Tables of Contents cannot begin to convey to the reader the complete information to be found in the publication. The more complex the subject matter the more an index becomes a must.

It is preferable to prepare an index from the page proof as the page numbers appear in page proof exactly as they will be found in the completed book.

Authors should retain the master set of page proof until indexing is complete inasmuch as in preparing an index certain inconsistencies are likely to be found and should be corrected before proof is returned to the publisher.

Should the author desire an index prepared for him, it can be done by the publisher at a reasonable rate.

#### HOW TO PREPARE

From Page Proof One plan of making indexes\* is to first of all go through a duplicate set of page proof underlining all of the words to be indexed and writing in the margin all of the cross references and subjects to be indexed. After this is done you are able to begin to write the entries. Note that corrections marked on the master proof (which is the set to be sent back to

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\* Deabow John Manuscript and Proof 3rd Ed New York Oxford 1943

the publisher) which might affect any entries should be marked on this set of proof used for the indexing

Cards for Entries Most indexers use cards of the 3 x 5 size. Entries are written on the cards in a consistent style on one side of the card only and with one entry to a card. As entries are noted, pile the cards on your desk for future sorting.

After all entries have been written on cards the cards should be arranged in alphabetical order. One easy way to do this is to make 26 piles -- one for each letter of the alphabet -- and put cards under their own letters. Then each pile may be arranged alphabetically within the letter. The next step is to combine all the references to the same entry in the proper order on one card. Then, all cards should be examined to be certain that they are in alphabetical order and cross-references are made as needed. Next, number the cards in one sequence so that they will not be lost or misplaced while being typed. Read all of the index entries to ascertain that the wording is correct and that the style is uniform.

Index Manuscript Cards should not be used for printers copy. It is preferable to retype from the cards onto manuscript paper after which the indexer should read his typewritten copy back against the cards. A typist should follow the plan of indentation, punctuation, and capitalization used in the cards. Of course reverse indentation frequently called hanging indentation should be used in typing the index. The following is an example of reverse indentation.

Drugs 16 24 18 41 Also  
see Appendix A Part  
II for determination of  
Roentgenograms 22, 39 164  
172, 183 217 234 268

## REVISION OF BOOKS

### REVISED PRINTINGS

An author will in the event his book is reprinted want to correct any errors that have been discovered. The best way to do this is to mark a copy of the book in the same way that the proof is marked. Then on the front flyleaf of the book, list all of the pages on which corrections have been marked. For straight reprintings authors should not go beyond the correction of mistakes unless asked to do so. Your publisher should be able to furnish a soiled or shopworn copy to use for the purpose of making corrections for reprintings.

When the corrections consist merely of the alteration of punctuation, spelling or substitution of one word for another the corrections may be indicated in the margins of the printed page. Authors who anticipate reprintings of their book may obtain an interleaved copy from the publisher. An interleaved copy has a blank page inserted between each two facing printed pages.

Corrections should always be indicated directly opposite the printed line in which the correction is to be made -- never below it. This eliminates possibility for error and facilitates running the copy through the holder with which monotype and linotype machines are equipped.

Corrections should be printed unless handwriting is extremely legible.

## REVISED EDITIONS

In revising a book and bringing it up to date an author should consider whether the changes are to be made to (1) standing type (2) plates or (3) if the whole book is to be reset in type. If many changes need to be made an author should procure two copies of the latest printing remove the sheets from the binding and carefully detach the sheets onto two sets of single leaves. An author should take as many sheets of manuscript paper (8 1/2 x 11) as there are pages (twice as many as there are single leaves) and paste the leaves on the manuscript paper on one side only so as to have a complete copy of the book laid down on manuscript paper.

When Type is Standing Minor corrections to the standing type should be marked as you have done on the proofs of the book.

When new matter is to be supplied such as the addition of new paragraphs or rewritten paragraphs that is too extensive to write in the margin of the printed page itself have the new matter typed and paste the new sheets of copy on the manuscript paper in their proper position in relation to the printed sheets of the book. When the book is in standing type as is the case here the location of each individual clipping in the printed book should be indicated by a line drawn at the beginning of the clipping in the margin in colored pencil with the appropriate page number from the previous edition listed thereon which will indicate to the printer the original page number so that he can locate the type to be used again for the new edition. If any standing matter is to be killed, do not simply omit it but be sure to leave every page in its order and complete and cross out the matter that is to be killed and mark it "kill".

It is preferable to have the new copy and the printed



sheets in their proper order in this way rather than to merely have the new copy on manuscript paper separate from the printed matter of the previous edition. Some authors will separate the new copy and the old printed sheets and will make notes on the printed sheets as to where the new copy is to be placed but following this procedure it can be confusing to the printer especially when there are numerous such references to new copy.

In many books when revisions to standing type are contemplated the shifting of pages or paragraphs will involve resetting the type and possibly changing the running heads and remaking of several pages. The deletions or insertions of words in a paragraph may necessitate resetting the entire paragraph. This oftentimes could be avoided by the expedient of adding or deleting words or phrases in the lines immediately following the correction insertion or addition. For example if a word is added to the first line of the paragraph a word of the same length should be deleted in one of the lines immediately following sometimes it is possible to use a short word in place of a long one and achieve the same result.

It is likely that a new edition will contain many of the illustrations and legends from a previous edition. The printed copies of these should be pasted in their proper position in relation to the printed sheets of text from the previous edition. When some of the illustrations and legends from the previous edition are not to be used do not omit the printed copies of these but leave them in their proper order and cross out that matter to be killed and mark it kill. If new illustrations and illustration legends are to be added to a new edition mark in the margin of the manuscript paper containing the paste ups of new copy and printed sheets the position of placement of the new figure as

Place Figure 12 here. New figures themselves should be kept separate from the text. New illustra-

tion legends should be typed on sheets separate from the text. Remember that the addition or deletion of illustrations in a new edition will change the figure numbers of other illustrations to be used and the author should see to it that the order of numbering of the illustrations is corrected as well as any text references to illustration numbers.

When a Book Has Been Plated. If changes are to be made in existing plates an author should learn from his publisher whether the publisher places any restriction on the expense of correction because if he does an author should try to supplant old materials with new matter which will fit in the same place so as not to disturb the pagination. If there is no restriction the author may incorporate as many changes as he wishes but he should not fail to keep a proof of each page in its proper position, marking kill on each page that is to be completely dropped.

When Type Must be Reset. If the work is to be entirely reset, an author can either use the set of printed sheets as a draft with which to make up new manuscript matter or start afresh as if he were writing a new book. In any case the publisher should be consulted as to the procedure for the author to follow so that there will be a clear understanding.

Interleaved Copies. In correcting books for a new printing or new edition this publisher is able to furnish authors with interleaved copies of their books having every other page in blank. These interleaved books are useful to the author for the purpose of making notes and suggestions for revised printings and editions. If there are only a very few corrections needed for a revised printing the interleaved copy may be sent by the author to the publisher as copy for the revised printing. However if there are considerable changes to be made it is preferable for the author to keep the interleaved copy in his own file for reference and to

sheets in their proper order in this way rather than to merely have the new copy on manuscript paper separate from the printed matter of the previous edition. Some authors will separate the new copy and the old printed sheets and will make notes on the printed sheets as to where the new copy is to be placed but following this procedure it can be confusing to the printer especially when there are numerous such references to new copy.

In many books when revisions to standing type are contemplated the shifting of pages or paragraphs will involve resetting the type and possibly changing the running heads and remaking of several pages. The deletions or insertions of words in a paragraph may necessitate resetting the entire paragraph. This often-times could be avoided by the expedient of adding or deleting words or phrases in the lines immediately following the correction. Insertion or addition. For example if a word is added to the first line of the paragraph a word of the same length should be deleted in one of the lines immediately following. Sometimes it is possible to use a short word in place of a long one and achieve the same result.

It is likely that a new edition will contain many of the illustrations and legends from a previous edition. The printed copies of these should be pasted in their proper position in relation to the printed sheets of text from the previous edition. When some of the illustrations and legends from the previous edition are not to be used do not omit the printed copies of these but leave them in their proper order and cross out that matter to be killed and mark it kill. If new illustrations and illustration legends are to be added to a new edition mark in the margin of the manuscript paper containing the paste ups of new copy and printed sheets the position of placement of the new figure as

Place Figure 12 here. New figures themselves should be kept separate from the text. New illustra-

tion legends should be typed on sheets separate from the text. Remember that the addition or deletion of illustrations in a new edition will change the figure numbers of other illustrations to be used and the author should see to it that the order of numbering of the illustrations is corrected as well as any text references to illustration numbers.

When a Book Has Been Plated. If changes are to be made in existing plates, an author should learn from his publisher whether the publisher places any restriction on the expense of correction because if he does, an author should try to supplant old materials with new matter which will fit in the same place so as not to disturb the pagination. If there is no restriction the author may incorporate as many changes as he wishes, but he should not fail to keep a proof of each page in its proper position, marking kill on each page that is to be completely dropped.

When Type Must be Reset. If the work is to be entirely reset, an author can either use the set of printed sheets as a draft with which to make up new manuscript matter or start afresh as if he were writing a new book. In any case the publisher should be consulted as to the procedure for the author to follow so that there will be a clear understanding.

Interleaved Copies. In correcting books for a new printing or new edition this publisher is able to furnish authors with interleaved copies of their books, having every other page in blank. These interleaved books are useful to the author for the purpose of making notes and suggestions for revised printings and editions. If there are only a very few corrections needed for a revised printing, the interleaved copy may be sent by the author to the publisher as copy for the revised printing. However, if there are considerable changes to be made, it is preferable for the author to keep the interleaved copy in his own file for reference and to

sheets in their proper order in this way rather than to merely have the new copy on manuscript paper separate from the printed matter of the previous edition. Some authors will separate the new copy and the old printed sheets and will make notes on the printed sheets as to where the new copy is to be placed but following this procedure it can be confusing to the printer especially when there are numerous such references to new copy.

In many books when revisions to standing type are contemplated the shifting of pages or paragraphs will involve resetting the type and possibly changing the running heads and remaking of several pages. The deletions or insertions of words in a paragraph may necessitate resetting the entire paragraph. This often-times could be avoided by the expedient of adding or deleting words or phrases in the lines immediately following the correction insertion or addition. For example if a word is added to the first line of the paragraph a word of the same length should be deleted in one of the lines immediately following sometimes it is possible to use a short word in place of a long one and achieve the same result.

It is likely that a new edition will contain many of the illustrations and legends from a previous edition. The printed copies of these should be pasted in their proper position in relation to the printed sheets of text from the previous edition. When some of the illustrations and legends from the previous edition are not to be used do not omit the printed copies of these but leave them in their proper order and cross out that matter to be killed and mark it kill. If new illustrations and illustration legends are to be added to a new edition, mark in the margin of the manuscript paper containing the paste ups of new copy and printed sheets the position of placement of the new figure as Place Figure 12 here. New figures themselves should be kept separate from the text. New illustra-

**Part II**  
**ILLUSTRATIONS**

## MANUSCRIPT + PROOF + ILLUSTRATION

submit new copy to the publisher as explained under  
Revised Editions above

Use a Pencil. In making corrections in original manuscript matter as well as to corrections in proof never use ink or colored pencil as these cannot be erased in the event that such corrections or alterations should be found unnecessary. Always use pencil as this can be erased easily. Pencil corrections should not be lightly written or they could be passed over without being seen.

**Part II**  
**ILLUSTRATIONS**





## 6

### ILLUSTRATION FORM

#### HOW TO FURNISH

Separate from Manuscript. Authors often feel it is more convenient to submit manuscript pages and illustrations together. However illustrations should not be mounted on manuscript pages nor placed within the manuscript. If placed within the manuscript they are apt to be damaged. The manuscript should be kept in one box or folder the illustrations should be put in another box or folder.

As Originals. Original drawings should be sent, or both originals and photographs of the originals.

As Engravings. Often authors can submit engravings (cuts or electroplates) with their manuscripts in the place of sending original illustrative matter. When this is done the figure numbers of these cuts should be written on the back side of the wooden block or metal plate. And whenever possible there should be included a proof of the illustration to which the publisher can refer and this should bear a corresponding figure number with the notation thereon that the cut is furnished. The proof should be placed in numerical order with the original illustrations or with prints of the original illustrations.

Shipping. Drawings and photographs often reach a publisher's office in a sorry condition. Photographs should never be rolled. Paper clips ought not to be used on photographs because they leave an indentation in the photograph which will show in reproduction. All

drawings and photographs should be carefully protected from bending and from the chance of having their edges torn in transit (See ILLUSTRATION MOUNTING page 42 )

For safety in shipment the size of illustrations should not exceed 12 x 18 inches

Relation to Text. If authors know where illustrations are to be placed in the manuscript they should so indicate in black pencil in the margins of the manuscript text as this will enable the printer to place the illustrations in their proper position with the legends set beneath when he makes up galley proof rather than having to wait until page proof is available. If the illustrations are not placed in their proper position, with relation to the text in the galley proof then it is necessary for the author to indicate in the margins of the galley where the illustrations or legends are to be placed

When illustrations are to appear on the same page or facing pages for comparative purposes the author should indicate this in the text in marginal notes in galley proof and on the original illustrations

Numbering When illustrations are mentioned in the text final numbers of the illustrations are inserted in the text and checked after all figures have been numbered consecutively throughout the book

Arabic figures are always used for figure numbers. Roman numerals are never used for figure numbers

In many texts mention of illustration numbers in a text is unnecessary if ample legends are supplied. Publication of later editions is facilitated if illustration numbers are not given in the text since additions or deletions of illustrations may be made by renumbering of the figures only without necessitating renumbering references to them in the text

Legends Legends to illustrations should be typed

double spaced, on 8 1/2 x 11 sheets separate from the illustrations one below another in the same numerical order as the illustrations themselves

It is not necessary nor desirable that the legends be repeated below the illustrations submitted. All that is necessary is that the legends are identified with the same figure numbers as those used for the illustrations

Reduction, Top, and Identification. It is well for an author to indicate on the back of illustrative materials the suggested reduction, the top the identification as 'Thomas-Myers' and other pertinent information pertaining to the way in which the illustration should be reproduced. Any directions or identifying words which are to be written on the back of an unmounted photograph should be done with the photograph laid flat on a perfectly smooth hard surface such as a glass top desk, so that no marking will appear to carry over to the face of the illustration (see (6) page 60)

## SELECTION OF ILLUSTRATIONS

### MODE OF REPRODUCTION

It is important to determine early the nature of the illustrations their approximate number and their distribution throughout the text

Choice of Process. The medical illustrator should constantly keep in mind that the majority of his clients have little if any knowledge of the various types of illustrative technic or reproduction. In their capacity they have the opportunity of making suggestions which will be invaluable to the author reduce the publisher's cost facilitate the work of the engraver or photolithographer and contribute to improving publications.

Before preparing original drawings or photographs the method by which they are to be reproduced should be carefully determined. The different processes of engraving have quite narrow limitations and to obtain the best results original copies must be perfectly adapted to a particular process.

Pen, pencil brush and crayon drawings and photographic prints are the originals from which illustrations are made. Pencil drawings require exceptionally careful handling and do not reproduce economically nor well. Crayon if used properly on specially prepared paper may be effectively reproduced but ordinarily its use is not to be recommended. Pen brush and camera are the tools to be depended upon and used.

Properly prepared drawings and photographs can be reproduced by the line and halftone engraving proc-

cases Zinc etchings from line drawings are the least costly Photographs and wash drawings are usually reproduced by the halftone process costing from one to three times more than line reproductions

Drawings are occasionally furnished which are so crude in technique or poor in lettering that they cannot be used in their original state and must of necessity be redrawn by a professional draftsman before they can be used for the book. If authors so desire rough pencil drawings could be furnished to the publisher containing the essentials of the design, and the publisher could commission a professional to make the drawings in proper form for reproduction. An estimate of cost will be given to the author for his approval before any expense is incurred, and the drawings resubmitted to him for approval before use in the book. However it is well for an author to provide for suitable illustrations in the original instance (For preparation of illustrations see page 53)

Consistency in Technique Whenever possible all new drawings in a book should be done by one and the same artist, using the same technique of reproduction for all illustrations

## BORROWING ENGRAVINGS

Availability An author may wish to use illustrations which have appeared in other publications It is sometimes possible to procure original engravings as the author of the original publication, or his publisher may be willing to lend them. If the publisher has the original engravings but cannot lend them, he may be willing to sell electroplates (duplicate engravings) to the publisher of the new manuscript

Size Engravings on electrotypes are not useful if not made in proper size or if they contain material not pertinent to the subject matter

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From Books. The original book publisher will most frequently have his original engravings stored even though the book has long been out of print

From Journals. Publishers or printers of journals are not likely to have stored engravings. These may be stored for a few months following publication and then either destroyed or returned to the author

Black and White Black and white engravings are usually furnished mounted on wood blocks

Color When authors are at times able to secure a loan of original color engravings or color electroplates the following should be kept in mind

- (1) Printers by and large prefer to have unmounted plates
- (2) These plates must be of the sort that can be printed on a flat-bed press; inasmuch as curved electroplates such as are employed in rotary-press printing cannot be run on most presses from which books are printed
- (3) It is necessary to supply a set of progressive color proof to indicate to the printer the exact shades of ink to use

In the event progressive color proof is not available tear sheets of the color illustration as printed are better for the printer's color reference than nothing at all

## BORROWING ORIGINAL ILLUSTRATION COPY

When an author wishes to reproduce illustrations from other publications and has permission to do so he can borrow the original engravings or electroplates if these are available and suitable. If engravings are not borrowed the author has three alternatives

Photographing the Originals He may photograph the illustration from the original publication which is

usually satisfactory only if the original photograph is a line drawing of clear sharp definition and line. A print from a halftone plate will cause trouble because in reproducing it another halftone screen must be added and as no two screen patterns will exactly coincide a cross hatched effect will result.

Securing the Originals: He may secure the original illustrations. This is always preferable to photographing even the best and clearest copy from the original publication. The author will generally have the original illustrative matter. This is usually returned to him by his publisher after engravings are made although some publishers reserve the right to ownership of original illustrations.

Follow the Original Pattern. New illustrations may be prepared after the original illustrations. This is done frequently since so often, the originals will not depict the exact condition or circumstance needed to be shown. When new illustrations are based largely on others it is first necessary to secure permission to copy and, upon receiving permission, to acknowledge credit to the original source such as  
After Homans

## MOUNTING, GROUPING, CROPPING, AND REDUCTION

### ILLUSTRATION MOUNTING

Should Illustrations be Mounted? It is not always desirable for authors to mount the illustrations to be furnished to the publisher. If an author has a definite grouping in mind unless the author is absolutely certain as to the manner in which the grouping of illustrations will reduce to fit within the page proper of the book it is preferable for him to leave the grouping to the publisher and to submit with the illustrations for the publisher to study an outline drawing as to the grouping in mind. It would be difficult for the publisher to cut apart an author's grouped mounting if such should prove necessary because some mountings are so stiff as to resist cutting apart without risking damage to the illustrations.

Drawing Board. All drawings whether for line or halftone reproduction should be drawn on white or blue-white paper or bristol board not on cream-white or yellow-toned paper. A separate sheet of paper should be used for the drawing of each figure, chart or diagram. A group of figures may be drawn on one sheet only provided all of them can be reproduced by the same process, all require the same reduction if reduced, and all letters and numbers are complete and perfect. Otherwise it is better to use a separate sheet for each figure (also see page 43).

Though drawings for line or halftone printing are made with black ink, the engravings may be printed

in any color or shade desired provided the extra cost for presswork is assumed

## ILLUSTRATION GROUPING

Sequence: Author's suggestions for the trimming and grouping of illustrations are helpful and are followed as closely as possible. Make certain that in illustrations having more than one part, that the parts are in the proper sequence. Too frequently the 'before' part of the picture is last and the 'after' is first.

Size. When possible to have more than one illustration in the same figure such as Pre-operative and Post-operative the two illustrations should be cut in sizes which are multiples of each other so that one cut can be made showing both illustrations. No matter how many parts there are in a cut it is still less expensive than making individual cuts of each part.

Identification. Sometimes authors will submit illustrations to the publisher which have the letters "A B and C etc., in the lower corners of the illustrations to identify such illustrations as being part of one figure. It is more desirable to have the publisher set the sub letters in type below each illustration rather than to have an identifying letter on the face of the illustration itself inasmuch as in new editions or printings there may be substitutions which would change the sequence of the letters and in which cases new engravings would have to be made.

The word *Figure* or *Fig* should never be a part of the illustration but should be set in type by the printer below the cut proper. Frequently it is the desire of the author to reuse a cut in some future edition or even in a different publication. A figure number included in the cut renders it useless for such purposes unless quite by coincidence the figure number would remain the same in its new position.

## ILLUSTRATION CROPPING

When to Crop Since a publisher's profit is contingent upon avoiding any unnecessary expense his first consideration with any illustration is maximum reduction compatible with usefulness of the figure to the reader. Usually line drawings require reproduction of their entire area but frequently only a portion of a photograph or x-ray need be reproduced to accomplish the author's purpose. Omission of unnecessary areas (cropping) is the responsibility of author and illustrator and the area to be reproduced should be determined before the copy is prepared. If the lettering on an illustration is properly executed in relation to the subject matter the problem of cropping is eliminated for both publisher and engraver.

How to Crop. If an entire drawing or photograph is not to be used and you wish to indicate what portion is to be taken out of it and reproduced there is no better way than to indicate important areas on a mask made of a semi-transparent paper. In order to do this take a thin sheet of paper and write the directions thereon. Then tip the edge of it lightly with rubber cement to the back of the photograph and fold the rest of the thin sheet-mask over the face of the photograph. Do not mark on the mask while it is over the illustration as your marks are apt to appear on the face of the illustration itself.

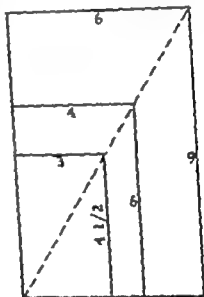
## ILLUSTRATION REDUCTION

Finished Size When an author is preparing new illustrations for a book or is having an artist prepare new drawings for a book the publisher should be consulted as to the probable type page size and page size in order that whenever possible illustrations may be made up to a scale which will reduce to the width of

the type page In a double-column book, many cuts will be made up by the publisher to the width of one column.

Proportion: A photo-engraver can reproduce his subject exactly the same size as the "copy" or any size larger or smaller as long as it is always in the same proportion in the reproduction as in the original copy. As an example an illustration four inches in

Figure 2. Diagram showing how to scale an illustration in final reduction or enlargement size



width by six inches in height to be reproduced in its entirety can be reduced or enlarged in any size (within limits) but always in the proportion of four to six. If reduced to three inches in width, the height will be four and one-half inches. If enlarged to six inches in width, the height will be nine inches. If a reduction must result in a plate three inches wide by four inches high, it is necessary to cut (crop) off the top or bottom

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How to Crop If an entire drawing or photograph is not to be used and you wish to indicate what portion is to be taken out of it and reproduced there is no better way than to indicate important areas on a mask, made of a semi-transparent paper. In order to do this take a thin sheet of paper and write the directions thereon. Then tip the edge of it lightly with rubber cement to the back of the photograph and fold the rest of the thin sheet-mask over the face of the photograph. Do not mark on the mask while it is over the illustration as your marks are apt to appear on the face of the illustration itself.

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## 9

# LETTERING AND LABELING

## LETTERING FORM

Consistency. It is important to have consistency in the spelling and punctuation of illustration labels or captions. It is preferable that the lettering artist work with one dictionary which, of course, would be consistent and to which all references to questions of spelling or punctuation be made. For example it is not so important whether a word is or is not hyphenated but rather it is very important that a hyphen either be used or not used for the same word in every instance. Words like and, by, a, etc. need not be capitalized.

Whenever possible lettering or labeling should be produced by the same lettering artist and by the same means or method.

Within Illustration Area. Insofar as it is possible to do so, lettering should be kept within the drawing dimensions as the area making up the drawing and the caption is that area which must be reproduced. The more that the lettering can be kept within the area of the drawing, the larger the drawing itself may be reproduced.

Types of Letters. Lettering of illustrations should be undertaken with a view to a neat and pleasing appearance when printed. A plain, open face, expanded type is to be preferred. The clearer and sharper the lettering, the more rounded and balloon shaped it is, the more accurately will it reproduce when reduced.



or both. If an enlargement will have to measure five inches wide by nine inches high something would have to be cropped on one or both sides. Measurements for enlargement or reduction may be calculated by proportion or graphically by the use of the diagonal of a rectangular figure. By this latter method draw a rectangular figure the size of the copy and its diagonal; this diagonal will be the diagonal of all reproductions of the same proportion.

Allow Room for Legends. In considering the reduction that illustrations may have special consideration should be given to the amount of room the legend is going to take on the page and as to whether there will be room enough on one page for both illustration and legend. In cases where obviously there will not be room for both arrangements may sometimes be made for the publisher to have the legend set at the foot of the opposite page with a rule above the legend and a small arrow pointing to the illustration on the opposite page.

Original Size. Original illustrations should be prepared about  $1/2$  size larger than the final reproduction will be. The reduction in size by the publisher will therefore provide for a sharpness not otherwise attainable.

by amateurs and produce a 'finished' job. Special pens with fine points that will fit the lettering grooves are needed for use with these guides.

4. Printed Letters. Printed lettering may be pasted on halftone original illustrations providing extreme care is taken to eliminate any run over of the paste or glue which would be likely to reproduce in a patchy effect.

Available are certain commercial types letters numbers leaders arrows etc in different sizes with transparent gummed bases which can conveniently be used if these bases will blend in with the tone of the photograph or drawing so that the bases will not reproduce. With some illustrations these transparent bases may tend to reflect light, creating an unpleasant effect but with other illustrations for halftone reproduction, they may be used satisfactorily. The glossy surface of prints may prevent labels from sticking or they may become loose. Labeling may be lost, without discovery until after an engraving has been made. In most instances this necessitates the making of a new cut.

5. For Combination Line and Halftone Copy. Letters or figures may be drawn or pasted at the marginal sides of the picture proper and light lines (leaders) drawn from the desired points to the marginal letters. The halftone area of the picture is mounted on artboard and the lettering is done along the sides.

When subject is not amenable to reduction, the lettering should be made with pen, type or carbon ribbon typewriter and reproduced to the required size in a photographic print or glossy photostat. Each label is mounted alongside the halftone copy. The engraver or photolithographer will photograph the halftone area

to a desired size. If lettering is done with large uneven lines and without a sharp enough effect a reduction may result in a muddy illegible manner. Care should be taken that all numerals and letters are sufficiently large to make the smallest character legible after being reduced to the size designated. The greater the reduction the heavier should be the lines to give sharp results. Lettering should be parallel to the base line which is best accomplished by use of a T-square.

While lettering need not always be done in capitals these are preferred as in reductions lower case letters may not reproduce clearly. When upper and lower case lettering can be used it may be worthwhile in adding to the dignity of an illustration.

Contrast All lettering of course should be in direct contrast to the illustration if the lettering is to appear as part of the illustrations i.e. white letters on black parts of the illustration and black letters on white parts of the illustration.

## LETTERING FOR HALFTONE REPRODUCTION

There are several ways of lettering illustrations intended for halftone reproduction.

1. By Hand Lettering may be done by hand directly on the drawing or photograph in black or white contrasting inks. Black India ink is used on light surfaces a white ink solution is used on dark surfaces.

2. By Typewriter Special typewriters have been developed -- now available at most institutions -- which type with carbon ribbons in faces which closely simulate those of printing types and which come in small and jumbo sizes.

3. With Lettering Guides Plastic lettering guides available in various sizes and letter designs may be used. Such guides are easily used

by amateurs and produce a 'finished job. Special pens with fine points that will fit the lettering grooves are needed for use with these guides.

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Typewritten labels should never be used unless such are typed on a carbon ribbon typewriter where an evenness of line can be achieved. Consult your publisher about this submitting samples of one or two illustrations with such captions for approval.

Dark typewritten labels should not be used over dark areas.

## LETTERING FOR COLOR TRANSPARENCY REPRODUCTION

Labels for plates from original color transparencies can be made easily by making a black and white print, mounting it and adding necessary lettering and leader lines on an acetate overlay placed over the print. The engraver can then make a line plate to the final size and run it to overprint, or combine the line engraving area with the color run in which the lines are to appear.

## LEADERS

Leaders should be in contrasting color to the illustration surface and leaders must often be in two colors -- black and white -- when the illustration surface is variable in color. Leader lines will always reproduce better if drawn on an acetate overlay and not on the copy.

Well drawn, even lines are absolutely necessary for clear reproduction.

Too many leaders on a single illustration are confusing to the reader.

When it is necessary to use more than two or three leader lines which have their points of definition close together it is best to draw them from their respective points of definition to the margin at different angles.

with and the line area without, a screen removing on the negative all shadow lines of pieces pasted on the illustration

Illustrations having leader-lines running from the illustration to legends outside the illustration proper which are to appear as part of the illustration, should be drawn in such a way that the wording appearing outside the figure can be removed if so desired by the publisher

A combination line and halftone illustration is about three times as expensive for the publisher to produce since a combination of the line and halftone processes is necessary. It is therefore recommended that another plan be used whenever possible

## LETTERING FOR LINE REPRODUCTION

The principal difference in lettering for halftone reproduction and line reproduction is that with the latter printed lettering on a thin non-transparent base may be applied to the face of original drawings or prints without the resultant reproduction having a patched appearance since in line reproduction no halftone screen is used in the photographic reproduction process. If paste is used it should have a colorless quality. Rubber cement is especially desirable. It is important to keep in mind however that numerals or letters printed on a heavy paper or cardboard should not be used for labeling line drawings as the additional thicknesses cast shadows which reproduce as black lines requiring extra routing or tooling by the engraver.

Care should always be given to make certain that letters or numbers affixed to the face of an illustration are placed squarely with the base of the illustration unless they must be at an angle

## LINE DRAWING REPRODUCTION

## COPY PREPARATION

Manner: Line engravings etched on zinc or copper are made by a direct photographic process from pen drawings composed of black lines or dots on a white surface or white on a black surface. The lines and dots must be sharp and clean cut with white or black showing between, and not blended together. Copy must be clean, of strong black and white contrast, and free from all pencil lines, patches or other defects. Smooth, heavy white or black paper or bristol board and undiluted ink, especially prepared for drawing purposes, are the materials to be used for the drawing. Every line or dot comprising a line drawing should be solid black or white and not shaded.

Illustrations drawn in varying shades of ink with wash or brush marks between solid lines or lines tapering to a thin shaded point, must be reproduced by the halftone rather than the line process.

Original Size: For line reproduction, the best results are obtained by making the drawing somewhat larger than the desired size when printed because the process of reduction softens down the drawings and gives a finer finish to the illustrations.

It must be remembered however that the large size drawing should be made in direct proportion to the desired completed size. Leader lines and other dense areas should be drawn somewhat darker and contrast should be greater.



## ARROW POINTS

Hand drawn or Artype (paper arrows with gummed backs) arrows may be used. The latter are preferred unless one is well qualified to draw arrows by hand. Often excellent illustrations will lose much of their effectiveness through the use of poor hand-drawn arrows.

Arrows should be in contrasting color to the illustration surface. On parts of a halftone which are medium gray in color it is best to use a black arrow with a white shading on one side.

If Artype or paper arrows are used care should be given to the selection of those that will not be out of proportion to the size of the illustration and that will reduce or enlarge to suitable size. Sometimes such arrows can be trimmed or the tail may be cut off to reduce their size. One of the largest failings found in original illustrations is that arrows are inserted to look sufficiently large on the original without thought that the arrows will reduce in proportion to the rest of the illustration.

is shown in Figures 3 and 4. A professional job can be secured through the judicious use of these materials

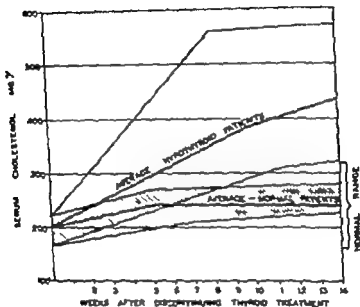


Figure 4 From Wildas, Lowson. *The Diagnosis and Treatment of Endocrine Disorders in Childhood and Adolescence* Courtesy Charles C. Thomas Publisher

It is interesting to note that the above illustrations have been reduced at least one-half after the application of the Ben-Day-like screen patterns

## BEN-DAY IN LINE DRAWINGS

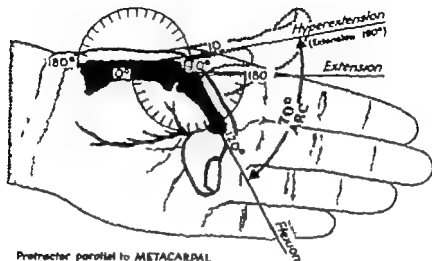


Figure 3 From Rice Carl O The Calculation of Industrial Disabilities of the Extremities Courtesy Charles C Thomas Publisher

Zip-A-Tone Ben-Day effects can be secured on line drawings (which can be made into zinc etchings) by the use of ZIP-A-TONE sold by the Para-Tone Co Inc 343 South Dearborn Street Chicago 4 Illinois The screened pattern is on the under side of the film (ZIP-A-TONE) This has a gummed base and is applied to the drawing by pressure Where tints are not wanted the film is cut away with a sharp knife Black dot patterns are available to apply over white areas and white dot patterns are available to apply over black areas

A sample of a few of the effects that can be secured

is shown in Figures 3 and 4. A professional job can be secured through the judicious use of these materials

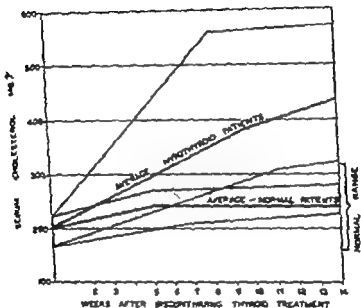


Figure 4. From William Lawson, The Diagnosis and Treatment of Endocrine Disorders in Childhood and Adolescence. Courtesy Charles C Thomas Publisher.

It is interesting to note that the above illustrations have been reduced at least one-half after the application of the Ben-Day like screen patterns

## BEN-DAY IN LINE DRAWINGS

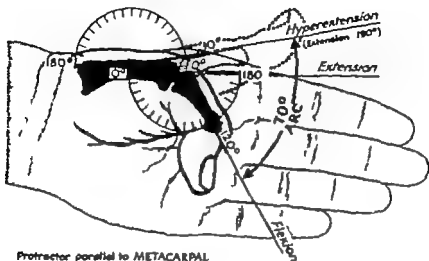


Figure 3 From Rice Carl O., The Calculation of Industrial Disabilities of the Extremities Courtesy Charles C Thomas Publisher

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A sample of a few of the effects that can be secured

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# -11-

## CHARTS AND GRAPHS

### COPY PREPARATION

In the normal run of preparing drawings of charts and graphs the following rules should be followed.

- 1 Draw a clean black line Use undiluted India ink
- 2 Do not use rough paper
- 3 Avoid using inks which contain blue
- 4 Keep in mind the amount of reduction that the subject will eventually take and with this before you do not draw the lines too finely nor too closely together
- 5 When drawing-in lettering keep in mind again the reduction and make an open face block type of letter
- 6 In making shaded drawings grease pencil or lithographer's crayons should be used It is important to remember that in this type of drawing your blacks should be black and not gray since any gray tone will only photograph black without the use of a screen
- 7 Background graph lines should appear as light as possible in a blue ink with no red mixed in it unless the graph lines are to be reproduced The background of blue lines can be eliminated by the engraver through a photographic filtering process Red tends to photograph as black Green graph lines usually contain some yellow and thus may

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Halftone Prints. A print from a halftone plate must not be used as copy from which to make another halftone plate. A halftone plate has a screen (a pattern of minute dots of which it is composed). A print from a halftone plate will cause trouble because in reproducing it, another halftone screen must be added, and as no two screen patterns will exactly coincide a cross hatched effect will result.

## HALFTONE DRAWINGS

Copy Preparation: In preparation of a mechanical drawing for eventual use for halftone reproduction, the same conditions must be remembered that apply to good photographs. Here however the artist can correct all the faults that are hard to correct on a photograph. Some of the things to be remembered by a medical artist are the following:

- 1 Do not use a paper which has any tint of yellow on it on which to make the drawings. Try at all times to use as white a paper as can be obtained. When an artist does his drawing on yellow drawing board or paper the resulting engraving is invariably dark since yellow or any shade of yellow photographs the same as black or any shade of black.
- 2 A light shade of blue should never be used since blue does not photograph. Brown and red photograph black. Green photographs gray.
- 3 Blue black washes should be avoided by the artist. He should use brown-black inks. The blue in the blue-black washes does not photograph consequently the finished engraving becomes lighter than the copy.
- 4 Shading from a gray tone into a white (or the white of the paper) should be more definite.

## HALFTONE REPRODUCTION

### COPY PREPARATION

Clean Copy. Practically all suggestions given for the preparation of drawings for line reproduction are applicable to those for halftone reproduction. Clean copy is most essential and cannot be over-emphasized as routing and tooling cannot always be employed and there are no means for eradicating spots or defects without impairing the engraving.

Glossy Black Prints. Photographs should be what photographers call glossy black prints they are better for reproduction than art photographs on rough or dull-surface papers. The most important point to be remembered in making photographs for reproduction is the absolute necessity for contrast and sharpness of detail. Exposure and development of the negative should be made with this intent and the detail scrutinized closely (see page 38).

Photostats. Photostats are not satisfactory for first-class engravings they will never result in anything better than second or third rate reproductions. Blue lines or parts will likely not appear in a reproduction.

Tooling. In halftones all white areas reproduce as tints and where the pure white of the paper is required in any part of the illustration the screen must be routed or tooled out at additional cost. Therefore all areas to be tooled out should be so indicated on the original drawing or photograph.

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for what looks good to the artist's eye on a shaded drawing will when it is cut up by a screen blend into the white background and consequently not produce the effect that the artist intended. Therefore avoid illustrations which do not have a well-defined edge.

- 5 Avoid putting borders inside the edges of the drawing
- 6 Avoid drawing illustrations which have parts of the illustration apart from the central figure
- 7 Stump shaded pencil or charcoal drawings can be reproduced only as a halftone
- 8 ALWAYS REMEMBER -- the artist draws from a three or four dimensional object and the artist thinks in the same terms. But the camera lens faces a flat surface of two dimensions only and can only take what it sees
- 9 All types of drawings when finished should be covered with a fixative in order to prevent any possibility of smudging or soiling from constant handling
- 10 It is well to consider the preparation of acetate sheet covering for new drawings. These covers can be fitted to the boards and closed on all sides like an envelope. When the engraver needs to photograph the drawing it may be removed from the acetate cover for a few minutes. The rest of the time drawings may be viewed through the acetate. Such covers do much to preserve the original illustrations until the engravings are completed. Many originals are of sufficient value to then be mounted or framed for permanent use in office or university.

There is a tendency among illustrators to make each drawing a work of art. The illustration is not intended to convey the ability nor artistry of the illustrator to the reader. All drawings should be kept as uncomplicated as possible with the least amount of flourishes and embellishments.

## ROENTGENOGRAMS

### SELECTION

The greatest care should be exercised in the selection of roentgenograms. This is not always possible since sometimes the roentgenogram that visualizes the exact information desired is of poor quality. In general however those roentgenograms are best for halftone reproduction that record maximum detail and do not show too much contrast. The usually accepted good quality roentgenogram is very apt to have too much contrast. Those that tend to be flat or in other words have a relatively long scale gradation in tone reproduce much better as a rule.

X-ray subjects are probably the most difficult type to reproduce for any kind of printing since with a few exceptions the photograph or print cannot be helped along by mechanical means.

In making reproductions from x-ray prints it is a great help to the engraver for each physician or technician to indicate on tissue overlays the area on the x-ray which is the pertinent part of his story. This area then can be concentrated on by the engraver.

Wherever possible make prints which eliminate unnecessary data such as initials dates file numbers etc. which might appear on the x-ray negative. These often detract from the illustration and seldom if ever add to the reader's ease in interpretation.

Prints made from x-ray films should be made with the area of principal interest as near as possible to the center of the picture.

## GENERAL CONSIDERATIONS

The essential steps\* of the most satisfactory method for producing a photographic copy of a roentgenogram are as follows. An intermediate negative - commonly referred to as the intermediate - is made in it the tonal relations of the original (the roentgenogram) are reversed. Then, a print (a facsimile) is made from the intermediate by any of the common photographic printing procedures or by photographing the intermediate by means of suitable equipment.

The first essential is that the various factors in optimum tone reproduction be fully understood. The roentgenogram must be considered solely as a series of brightness differences since from a photographic standpoint its details are nothing more than variations in the densities of the silver deposits. In order to record all of the essential features it is necessary to reproduce visible density differences of the original as visible density differences in the facsimile.

From this aspect, roentgenograms vary in two respects (1) The extent of the scale of tones or contrast (2) The degree of opaqueness or density of the areas that transmit the least light and yet possess detail. Characteristic tones exhibited by a roentgenographic image are A dark areas devoid of detail; B the darkest areas in which detail is visible; and C the lightest areas exhibiting detail. B and C are the critical areas to be considered in every phase of the reproduction process.

The important contrast of every roentgenogram is the difference in the densities of areas B and C since they determine the extremes of the tone scale. If the difference is great, the roentgenogram has high contrast; if the difference is slight, the roentgenogram has low contrast.

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Estimate Kodak Company: Radiog. & Clin. Photog. 12-4-1942



# -13-

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REVERSE AND FACSIMILE -- TONE  
ROENTGENOGRAMS

Roentgenograms can be made as reverse -- and facsimile -- tone reproductions. In reverse-tone reproductions the tonal relations are the reverse of those of the original roentgenogram. Facsimile-tone reproductions of the same tonal relations as those of the original roentgenograms are preferred by most roentgenologists in the United States.

Many printers and engravers are prepared to make reproductions that are facsimile in tone only from facsimile tone paper prints as a result that type of copy should always be submitted with manuscript. When the original film of roentgenograms is submitted it is possible that the engraver would reproduce them with the tone relations reversed and consequently the full value of the illustrations is not realized.

The copying of roentgenograms of high contrast presents a two-fold problem. It is necessary to record in the intermediate areas of very high density (corresponding to area B) without obliterating detail through over exposure. In areas of low density (corresponding to area C) therefore photographic film that has extensive exposure latitude must be selected. In addition it is necessary to compress the density range of the intermediate so that when it is printed on paper important density differences existing in the roentgenogram are distinguishable in the print. This is usually accomplished by developing the film for a relatively short period or by employing certain dodging procedures.

The latter range of the problem arises from the fact that while a certain range of densities in an image on a film base may be readily seen when viewed by transmitted light only a portion of the same range of density can be seen when the image is on a paper base and is viewed by reflected light. It is therefore easier to produce a facsimile of high quality on film than on paper and it obviously follows that if an intermediate is of suitable quality to provide an acceptable image on paper it will provide an acceptable image on film.

While the degree of contrast in a roentgenogram is affected by many factors all roentgenograms of the same regions made by employing the same facilities will exhibit approximately the same contrast. Furthermore the contrast that characterizes roentgenograms of certain anatomic regions is comparable to that of certain other regions. For these reasons roentgenograms of various anatomic areas may be grouped for copying according to the degree of contrast they possess.

It is advisable from both an economic and an artistic standpoint to group as many illustrations as possible. Tones will be more uniform and costs less.

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## COLOR REPRODUCTION

### COPY PREPARATION

Expense. Color engraving and color printing is so expensive that color illustrations should only be planned when publisher and author are in mutual agreement as to their use. Refer to Figure 5 for an indication of these costs.

Numbering. Color plates, whether process color or line color, should be numbered separately from the text illustrations as Plate I, Plate II, etc. Usually color work is printed separately from the black text and the use of Plates for the color allows for their omission or insertion without disturbing the numbering of the text, black and white figures.

Reproducing Color in Black and White. Sometimes authors will wish to reproduce in color illustrations that which would show up fairly satisfactorily in black and white. When in doubt as to the way in which color work would reproduce in black and white, the publisher would be glad to make up a sample reproduction in black and white for the approval of the author.

Avoid Unnecessary Color. When a simple black and white halftone can be made, many artists will include one other color for contrast and for the artistic touch. Any color added to black and white more than trebles the cost of reproduction.

Selection of Color. In drawing for color reproduction, every artist should know what intensities of reds, yellows, and blues will reproduce to the best

Plate Costs	High Quality or 10 Line Screens or Change line Black and White		Black and Color Medium	Black and Color Large	Black and Color Medium	Black and Color Large	Black and Color Medium	Black and Color Large
	Medium	Large						
1/2	20		5.5 00	70	20 00	1 50	100 00	5 00
1			20 00	30	20 00	1 00	60 00	5 00
	75	70		60	60 00		205 00	22 00
	0		20 00	10 00	5 00	10 00	200 00	25 00
0	05	5 00	20 00	10 00	7 00	10 00	20 00	20 00
	05	50	60 00	1 00	200 00	25 00	200 00	20 00
Prepress, etc Costs :	70 00	70 00	100 00	80	60 00	60 00	100 00	100 00
Special run for legend :			20 00		20 00		20 00	

Color plates made from overlays supplied by author

- 1 This also go includes taping in, uncutting, etc. for one page, printed on one side. The prepress charges to be set at cost of \$100.00
- 2 Color plates for line illustrations are per inch and legends are to printed with black plates.

Figure Examples of color engraving and print work costs. T. Figure the approximate cost of 9 line color plate, separate halftone, the engraving would cost approximately \$115. Prepress, etc. would cost \$100.00. The separate run for the legend would cost \$20.00 each. Total cost for the reproduction \$245.00.



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slight so detail and sharpness may be retained. Color prints should be submitted in a size one half larger than the final reproduction is expected to be.

Proportion: Where there are several transparencies, slides or prints to be reproduced, these should, if possible, be reproduced or reduced as a whole rather than as single units. Single unit reproduction is necessary only if the transparencies, slides or prints require different degrees of reduction. Whenever possible these original transparencies, slides and prints should be in the same proportionate size.

How to Furnish: If color transparencies are to be furnished, these should be sent in glassine envelopes rather than mounted between glass or on cardboard mounts. A gummed sticker at the top of a glassine envelope is the best way to identify color transparencies. The important thing is not to remove the transparency from the glassine envelope as they are returned in these envelopes to prevent any fingerprinting or other handling damage. If the transparency is centered in the envelope, a grease pencil mark may be made on the envelope to indicate the correct position. If any cropping of the transparency is necessary, this can also be indicated with a grease pencil on the glassine envelope (after the positioning marks have been made). It is never wise to include the identifying figure number on the face of the transparency or print as once the plates are made the numbers cannot be changed for future use.

## REDUCTION OF PROCESS COLOR ILLUSTRATIONS

It should be understood that a reduction in size of color work through the use of four color process methods will not give as clear an end result, with as fine

advantage All too frequently pastels are used which cannot be held in making a reduction and reproduction This means re-etching of each color and a skyrocketing of costs

## COLOR TRANSPARENCIES

Copy Preparation For color transparencies lighting focal depth and exposure are more important than in black and white reproduction It is axiomatic that the engraver can get no more than is portrayed by the photographer Choice of subject material and posing becomes more important with color

Backgrounds When taking color pictures use a background of either a neutral color or a background with a directly contrasting color to that of the object being photographed

Color Values Transparencies slides or prints should contain those values of color which are desired to be shown It is not satisfactory to attempt to effect color correction through the use of correcting inks

The primary colors of red yellow and blue photograph well together

Pastels should be avoided if possible as these are the most difficult colors to reproduce accurately

Slightly under-exposed light bright kodachromes make better four color process plates than those more heavily exposed

Transparencies Versus Prints Authors will sometimes wish to know whether transparencies or slides or enlarged color prints should be submitted to the publisher In this regard much depends on the nature of the illustrations to be reproduced It is suggested that the publisher be consulted as to his opinion on the preferred procedure

Original Size If transparencies should be used sizes of 4 x 5 or 8 x 10 are the best copy to reduce from and if it should be necessary to enlarge from these sizes the amount of enlargement needed is

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details or gradation of color as will a reduction to a similar size through a photographic color transparency process. In the latter the background is continuous so that a reduction in size results in a loss of detail and gradation in proportion to the reduction in size. In four color process engraving the color is obtained by using a series of small dots of fundamental colors which give the visual impression of color by fusion of the small dots. Since reduction in size of the prints does not effect the spacing between the dots the visual fusion is not as effective. Therefore the end result of the photographic process is quite different from that secured by the engraving process and it should not be assumed that a color transparency reduction to a minimum size though sufficiently clear in the transparency would be of the same clarity through reproduction in this size by an engraver. Always consult with a publisher's engraver on the feasibility of color process work.

### THREE COLOR PROCESS

It is extremely hard to generalize what copy could be used as three color process in lieu of the customary four color process. In this case also it would be well for the engraver to judge the copy. Then he could say if the dropping of one color would detract from the value of the illustration. The chances are better in making three color process from artwork copy rather than color transparencies. Normally black is the color dropped. This one color usually makes a far better job as black is the color that adds tonal detail and brilliance to a set of four color process engravings.

No one is in a better position than an engraver to answer questions which may arise on this subject and technical problems of this sort should be discussed before any work is done.

## LINE COLOR REPRODUCTION

Copy Preparation: In line color illustrations there is no blending of colors. The colors used are definite and separate within themselves. An engraving is needed for each color used and each added color requires an added press run.

Separate black line tracings should be made for each color used. These tracings should be prepared on celluloid sheets to prevent scratching or blurring after the drawings are made.

It should be kept in mind that in the printing, the black is normally put down first and then the colors. Transparent holes are used so that any black shading lines within the color mass areas will still show. Everything in the black original tracings will show in the final reproduction. For these reasons, black lines are used on the celluloid sheets rather than the actual colors to be used in printing. These actual colors should be indicated in a square of color in the corner of each overlay sheet.

The greatest care must be taken that register marks are placed accurately in two margins on the original and all tracings. These extra marks are similar to crop marks and are necessary for the proper positioning of the different colors on the page. The mark will not be printed.

The preparation of color drawing on black line tracings such as described in the manner above is the most economical technique by far for author and publisher. Artists welcome this method of treatment since it takes less time to make three separate line tracings than to incorporate all actual colors into one drawing. When all actual colors are incorporated into one drawing a publisher or engraver has the extra cost of color separation and color separation requires. Furthermore the cost of each color plate is a lot

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It should be kept in mind that in the printing the black is normally put down first and then the colors. Transparent inks are used so that any black shading lines within the color mass areas will still show. Everything in the black, original tracings will show in the final reproduction. For these reasons black lines are used on the celluloid sheets rather than the actual colors to be used in printing. These actual colors should be indicated in a square of color in the corner of each overlay sheet.

The greatest care must be taken that register marks are placed accurately in two margins on the original and all tracings. These extra marks are similar to a plus sign and are necessary for the proper positioning of the different colors on the page. The mark will not be printed.

The preparation of color drawing on black-line tracings such as described in the manner above is the most economical technique by far for author and publisher. Artists welcome this method of treatment since it takes less time to make these separate line tracings than to incorporate all actual colors into one drawing. When all actual colors are incorporated into one drawing a publisher's engraver has the extra cost of color separation and color separation negatives. Furthermore the cost of each color plate in a set



details or gradation of color as will a reduction to a similar size through a photographic color transparency process. In the latter the background is continuous so that a reduction in size results in a loss of detail and gradation in proportion to the reduction in size. In four color process engraving the color is obtained by using a series of small dots of fundamental colors which give the visual impression of color by fusion of the small dots. Since reduction in size of the prints does not effect the spacing between the dots the visual fusion is not as effective. Therefore the end result of the photographic process is quite different from that secured by the engraving process and it should not be assumed that a color transparency reduction to a minimum size though sufficiently clear in the transparency would be of the same clarity through reproduction in this size by an engraver. Always consult with a publisher or engraver on the feasibility of color process work.

### THREE COLOR PROCESS

It is extremely hard to generalize what copy could be used as three color process in lieu of the customary four color process. In this case also it would be well for the engraver to judge the copy. Then he could say if the dropping of one color would detract from the value of the illustration. The chances are better in making three color process from artwork copy rather than color transparencies. Normally black is the color dropped. This one color usually makes a far better job as black is the color that adds tonal detail and brilliance to a set of four color process engravings.

No one is in a better position than an engraver to answer questions which may arise on this subject and technical problems of this sort should be discussed before any work is done.

## LINE COLOR REPRODUCTION

Copy Preparation: In line color illustrations there is no blending of colors. The colors used are definite and separate within themselves. An engraving is needed for each color used and each added color requires an added press run.

Separate black line tracings should be made for each color used. These tracings should be prepared on celluloid sheets to prevent stretching or shrinking after the drawings are made.

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would have to be based on the overall size of the black plate. In other words the size of the black plate is the determining factor in the cost of color plates. In plates made from separate black-line tracings for each color used the cost of each color plate would be based on the actual size of the color areas rather than the black plate.

Primary colors should be indicated for use in the reference color squares on each celluloid sheet. Pure colors must be used. Pastel shades do not reproduce faithfully.

Colors should be kept to an absolute minimum. Each different color requires a separate pressrun except in process color work. Ben-Day Craftint and similar techniques. If one additional color is used it should be used in all drawings which contain color. Different intensities and shades of the same color should be avoided the same as an additional color.

Original Size Complicated drawings should be drawn for four or six times reduction instead of two or three times. Detail and lettering crowded into an original frequently detract greatly from accurate reproduction and jam an illustration.

## DUOTONES

In some cases duotone engravings can be used successfully in medical book work. However it is best to consult the engraver in each instance before it is definitely decided just how the work should be handled. If it is an ordinary black and white photograph which the author would like in a duotone technique indicate on a tissue overlay where the second color is to appear. In photoengraving (assuming that the two colors are black and orange) the etcher will etch down the black plate wherever the orange prints. Each negative is a halftone negative. In other words the

copy detail is in both color negatives hence the description "duotone" In this type of plate work, the negatives are made on different screen angles This tends to print the two colors side by side with little danger of them overprinting one another

## REFERENCES

- 1) Benbow John. Manuscript and Proof 3rd Ed New York Oxford, 1945
- 2) Fishbein, Morris: Medical Writing: The Technique and The Art, 2nd Ed. Philad lphia Blakiston, 1948
- 3) Tainstor Sarah A and Monroe Kate M: The Secretary's Handbook, 6th Ed New York, Macmillan, 1941

# 16

## GLOSSARY

- Antique Paper** Unfinished paper with a rough surface as it comes from the paper machine
- Ascenders.** Letters that have a part ascending above the low part of the type as l h, d etc and capitals; g y p j q are descending letters
- Author's Proof** A clean proof sent to the author after the compositor's errors have been corrected
- Backing Up:** Printing the second side of a sheet In fine printing it is necessary for the ink to dry on one side of the sheet before it can be backed up for printing on the other side
- Body Type** The kinds of type used for plain composition in paragraphs or pages; text type
- Bold Face** Book type with heavy lines thickened making the entire letter blacker than its light face counterpart
- Book Cloth.** Cloth used for making covers or cases for books It is made by special processes and in many different grades and patterns
- Book Paper.** The term is applied in a general way to a large class of paper used in books periodicals and advertising pamphlets Other classifications are writing news poster label cover etc
- Borders** Characters cast in type which may be adjustable in many ways as for marginal lines panels and other decorative uses Also cast in strips
- Cap** An abbreviation of Capital Capital letters are known as caps



## -15-

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- Cap** An abbreviation of Capital Capital letters are known as caps

- Caps and Small Caps** Two sizes of capitals are made on one size of type body Common in most types the small caps are capitals only as high as lower case letters Often set together in combination
- Clean Proof** When a compositor sets his type without errors or with very few he sets a clean proof
- Close Matter** Type set solid and with few break-lines
- Colophon** A printer's or publisher's trademark formerly it was placed at the end of a book In ancient times colophons were obligatory
- Compositor** One who sets type according to the class of work done he is termed a book newspaper ad or job compositor
- Condensed** The word is applied commonly in printing to designate a type face thinner than normal usually connected with the words which name it specifically This face is normal
- Cut Flush** When the cover on a book pamphlet or other work is trimmed at one cut with the inside so that all edges are flush
- Dead** Applied in several ways to matter whose usefulness or interest has gone by dead matter is type that has been printed and is ready for distribution dead copy is that which has been prepared but for some reason is not to be used Type forms after use are killed Sometimes part is saved for use again and this with all other matter ready or in preparation but not printed is alive
- Deckle-Edge** The untrimmed feather-edge formed where the paper pulp flows against the deckle Hand-made paper has four deckle edges machine-made paper two
- Dele** A proof reader's mark means to take out to expunge (abbreviation of delete)
- Descenders** The letters which have part of their faces below the line g p q y etc
- Die** An engraving used for stamping binding cloth or leather

**Display Type** A general term for those styles of heavier type faces designed for headings and advertisements as distinguished from those used for plain reading matter; commonly put up by foundries in small assortments called job fonts

**Dot Leaders.** Those cast with dots thus                      in distinction from hyphen leaders - - - -

**Dotted Rule** Brass rules with dotted face for blank work, to serve as a guide for writing on

**Drop-Folio** A page number placed at the bottom of a page

**Dummy** A bound copy of a book containing only blank pages Used to display exact size of the finished publication.

**Duotone** An ink which on drying gives the printed page the appearance of having been printed in two colors

**Eggshell.** A kind of paper See Antique

**Electrotype** A replica of composed type plates etc forming a printing surface This is produced by covering an impression made from the set type in wax or similar substance with a galvanic coating of copper which is afterwards backed up by an alloy

**Em:** The square of a type body The common method of measuring type composition is by ems The number of ems in a line being multiplied by the number of lines The term is applied in many ways to printing material as em-dash-- em-quad

**End Papers** The blank leaves at the beginning and end of a bound volume one sheet being pasted down upon the boards

**Engravings** The act or art of producing letters or designs on wood, metal or other material. The chief methods of engraving now practiced for illustrative purposes are steel, zinc or copper-plate engraving

**Errata.** Applied to a list of errors and corrections in

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- Die** An engraving used for stamping binding cloth or leather

or four pages usually understood as a sheet the size of 17 x 22 inches which gives a folded leaf 11 x 17 inches

**Ratio:** Page numbers as used in a book.

**Set:** A complete assortment of type of one size and face

**Form:** A page or number of pages engravings or lines of type locked in a chase ready for printing

**Format:** The size form, proportions design etc of a book or other work

**Galley:** The shallow tray used by compositors to hold type after the lines have been set in the composing room. It consists usually of a thin brass bottom with three perpendicular sides a little more than half an inch high the fourth side is open to permit the type when tied up to be pushed off on to the imposing stone or elsewhere The usual full-length galley is about two feet long and from four to seven inches wide but many wider sizes may now be obtained Short wide galleys of various sizes are used by job compositors for making-up book pages and for other special uses

**Gathering:** Assembling the printed and folded signatures in correct order preparatory to the binding

**Gutter:** The blank space which gives the inside or binding margin of a book sheet Each page of a book or pamphlet has a top margin an outside margin, a foot margin and a back or gutter margin

**Half-Title:** The title put on a right hand page preceding the title page also applied to the title which precedes the first text page of a book.

**Halftone:** An engraving plate made by photographic and chemical methods in which the surface or printing part is composed of a series of fine dots A halftone process plate is made by photographing the picture through a screen interposed between

a book which are of sufficient importance to be called to the attention of the reader sometimes inserted at the end of the book in other cases at the beginning or printed on a slip and tipped in beside the page containing the error Modern methods have made the need of errata pages less frequent than formerly

**Etching** The art or practice of producing figures or designs on metal glass or the like by means of lines or strokes eaten in or corroded by means of some strong acid The plate is first covered with varnish or other ground capable of resisting the acid and this is then scored or scratched by a needle or similar instrument so as to form the drawing the plate is then covered with acid which corrodes the metal in the lines thus laid bare

**Even Folios** The page numbers of the left-hand pages 2 4 6 etc The odd folios are those of the right-hand pages 1 3 5 7 etc

**Extended, Expanded** An extra wide face of type

**Extended Cover** A cover slightly larger than the inside pages of the book or pamphlet it is used to bind

**Extra Condensed** Used to describe a type face which has been compressed very thin sideways A style used largely in narrow columns of newspapers and in advertising work

**Face (of a type or form)** That part which prints as distinguished from the shank and shoulder also used to express one style of type from another as plain face heavy face etc

**Flyleaf** A blank leaf at the beginning or end of a book it may be inserted by the binder but may be a blank leaf of the first or last sheets of the printed work Sometimes these are printed with decorative designs

**Folio** A sheet folded once consisting of two leaves

or four pages usually understood as a sheet the size of 17 x 22 inches which gives a folded leaf 11 x 17 inches

**Folio:** Page numbers as used in a book.

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the copy and sensitive plate in a camera. This screen is placed near the plate and - the light passing through it - the object on the negative is broken up into a mass of minute squares or dots which are larger or smaller as the corresponding parts of the copy are darker or lighter.

**Hanging Indention** That form of paragraph which is set with the first line full length and subsequent lines indented (as in these pages) usually employed in dictionaries catalogs bibliographies indices etc.

**Head-Piece** The ornamental panel or picture placed at the top of a page in a book usually at the beginning of chapters where the open space left by the sinking of the heading is utilized for decoration. Head-pieces tail pieces and initials are used to give variety to the text of plain type pages stock patterns and conventionalized designs are common although many works are now decorated with special designs appropriate for the text. The most pleasing effects are obtained when the head-pieces initials and tail-pieces of a book are uniform in style and not too prominent or obtrusive.

**Inferior Letters or Figures** Small characters cast on the bottom of a line or for footnote references subscripts.

**Imprint** The name with or without address of the printer or publisher on his work, usually placed inconspicuously and it may be in plain small type or in the form of a trademark or significant device.

**Insert** A separate sheet usually of heavier or different quality of stock and especially printed bound into a magazine pamphlet etc. An illustration inserted in a book is termed a plate by bibliographers.

**Interleave** To place extra sheets usually blank be-

tween the printed sheets as to insert sheets of blotting paper between the leaves of a bank book. Interleaved copies are frequently supplied authors so that notations can be made relative to subsequent editions.

**Leading** To space out printed matter by inserting leads

**Leads** (pronounced leds not leeds) Thin strips of soft metal used between lines of type to open them out more or less. They are made in different thicknesses based on the point system.

**Line Engraving** That style of engraving in which the effect is produced by lines or combination of lines. These are always solid black and white or other colors without shading or fading of tone.

**Linotype** A machine for setting type and casting it in lines instead of single characters.

**Lithography** The process of printing from a flat stone. The design to be printed is drawn on a stone of peculiar quality with a specially prepared ink, which clings to and dries on the surface. The surface is then subjected to the action of a weak acid that hardens the ink and slightly etches and lowers the unprotected parts. The process of printing first requires moistening the surface with water which is absorbed by the blank parts and repelled by the hard greasy lines of the design. Printing ink is then rolled over the stone and is in turn, repelled by the wet parts but adheres to the ink drawn design. The stone thus prepared is ready to make an impression on the sheet. It will thus be seen that the theory of lithographic printing is based upon repulsion between grease and water. The term is also applied to modern methods of a similar nature in which metal, not stone, is used.

**Lower Case** The small letters of the alphabet. Small

the copy and sensitive plate in a camera. This screen is placed near the plate and - the light passing through it - the object on the negative is broken up into a mass of minute squares or dots which are larger or smaller as the corresponding parts of the copy are darker or lighter.

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**Interleave** To place extra sheets usually blank be-

of type equal to 12 point. It is the standard of measurement for leads rules furniture and also for width and length of pages. Six picas equal approximately a linear inch.

**Preliminary Matter:** The title preface table of contents etc. which come before the main text of a book; the front matter frequently called prellims.

**Presswork:** This commonly includes all the operations necessary for printing embossing bronzing scoring (when done on a press) and all kinds of labor which pertains to the press after it is erected and in running order. Presswork includes caring for rollers inks and paper as well as the proper handling of the press and the form and calls for skill in proportion to the class of printing done.

**Process Printing:** Printing separate plates in different colors one over the other so that they combine and produce various shades from the super-imposing of one primary color on another. Three-color process is the most common, the colors used being yellow red and blue in the order named.

**Register:** To adjust the pages of a form so that they will print exactly on the back of those printed on the first side; to impose a form or to fix the gauges on the press so that the pages when printed back to back on the sheet, will strike in the proper places. To print two or more colors beside each other or one over the other so that they will print in the proper places.

**Reprint:** Copy for a book or other work which has already been printed, in distinction from written manuscript. A second or new printing of a work.

**Reprint.** Over-run from a book or periodical of certain chapters or articles usually for distribution by the author.

**Revis:** A proof taken after corrections have been

letters are termed lower-case letters to distinguish them from the capitals and small capitals

**Making Up** To arrange lines of type into uniform pages with headings page numbers footnotes etc including the needed blank spaces Making up usually includes all the operations needed after type has been composed and corrected on the galley until it is ready to be printed

**Mounted** When a sheet or print is pasted on a larger and heavier sheet or a card An electro or engraving is mounted on a base of wood or metal to make it the same height as type

**Off-Set or Set-Off** When the face of a freshly-printed sheet rubs and smuts the sheet on top of it The squeezing together of a number of sheets as when cutting under the clamp of a paper-cutter will set-off on to the facing page ink that is not thoroughly dry

**O.K. Proof** Mark of approval on proof

**O.K. with changes (or corrections)** Mark of approval on proof with minor changes

**Out of Register** When the pages on both sides of a sheet do not back each other accurately the sheet is out of register or when the two or more colors of a job do not strike in proper relation to each other the job is out of register

**Overlay** A piece of tissue paper or plastic put on an illustration to either outline important areas or to have drawn on it parts of the illustration to appear in a different color

**Over-Run** The number of extra sheets printed to provide for spoilage in manufacture

**Page Proof** An impression of the type after it has been made up into page form

**Photo-Gravure** A print and also the process of making a print from an intaglio engraving

**Pica** Old name but still commonly used for a size

**Set:** Written opposite a word in proof to signify that it is wrongly marked out and should be retained

**Verso:** The left-hand side of a book; back or reverse side of a book cover or page

**Vignette:** Before the day of halftones the term vignette was applied to little wood cuts that preceded the title page or were used to embellish initials and as chapter heads and tail-pieces not enclosed within a definite border. These cuts contained garlands, festoons and trailing vines hence the name vignette. A decorative or illustrative tail-piece. The term is now generally applied to halftone plates finished so that the background screen fades away gradually and merges into the surface on which the print is made.

**Wash Drawing:** A drawing made in sepia, India ink or transparent colors in which the colors are washed evenly and lightly over the surface as with a brush. Used for architectural drawings, machinery, industrial designs, etc. A style of picture adapted for reproduction by halftone engraving process.

**Widow Line:** The last line of a paragraph which contains only one small word or the end of a hyphenated word whose forepart is on the previous line. Not considered in good form to use.

**Wrong Font:** A wrong letter or character in a line caused by mixing fonts of type in proof written w/

**Zinc Halftone:** The cheaper, coarse screen halftones such as are used by newspapers are etched on zinc instead of copper, the latter being used for finer work.



made to compare a proof so taken with the one on which errors are marked to see if corrections are properly made

**Rotary Press** A printing press in which the type or plates are fastened on a rotating cylinder and are impressed on a continuous roll of paper

**Rough Proof** A hurried proof taken without special care as with a planer or on galley press hand press etc

**Rule** Thin strips (of brass usually) type-high and varying in thickness from 1-point to 24-point for printing straight lines etc

**Running-Head or Running-Title** The title of a book or subject placed at the top of each page

**Saddle-Wire Stitching** Wire stitching through the center of the back of a book instead of through the side

**Score** To crease cards or thick paper slightly so that they can be folded exactly at certain points

**Script** A general name for the class of types designed to imitate handwriting Script type is expensive to make its long kerned faces with delicate hairlines render it fragile Its use is now very limited except on fine cards and society work

**Set Solid** To set lines of type close together without leads or other material

**Short Page** When the type matter does not fill it to the same length as its mates and it has to be filled out with blank material

**Side-Wire Stitch** Stitching the book near the binding margin with wire staples so as to leave a square back

**Signature** A sheet after it has been folded and is ready to be gathered It usually consists of 16 pages but may comprise 4 8 32 or 64 pages

**Standing Matter** That which is kept from one printing to another like advertising notices or other composed matter

**Stet:** Written opposite a word in proof to signify that it is wrongly marked out and should be retained

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